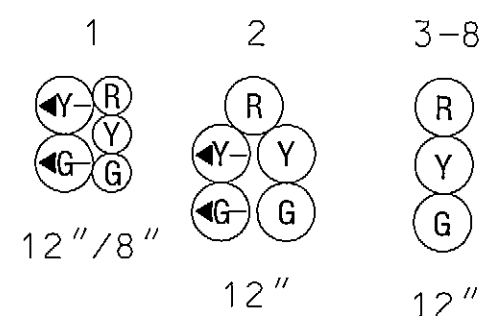
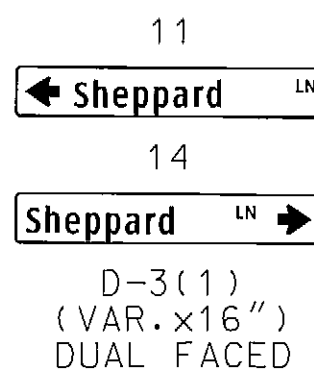


MD 108 IS ASSUMED TO RUN  
IN AN EAST-WEST DIRECTION

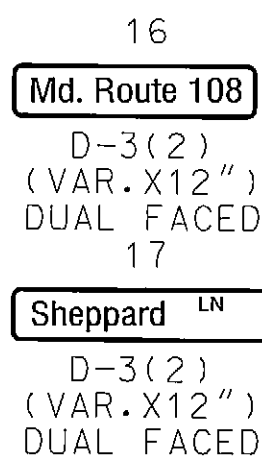
#### PROPOSED SIGNALS



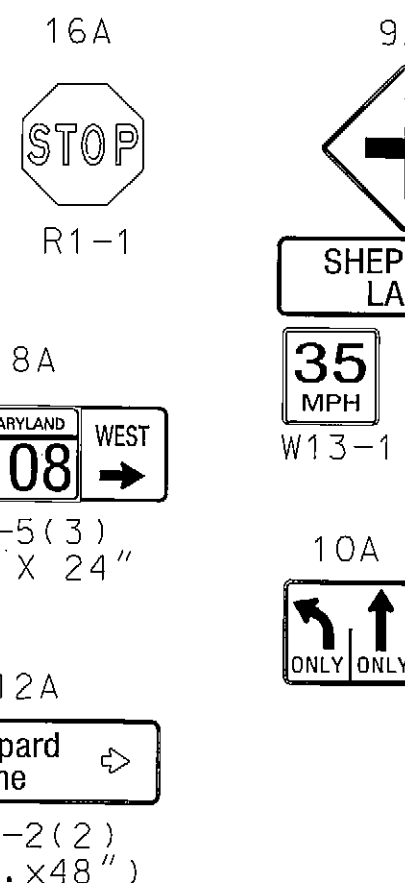
#### PROPOSED SIGNS



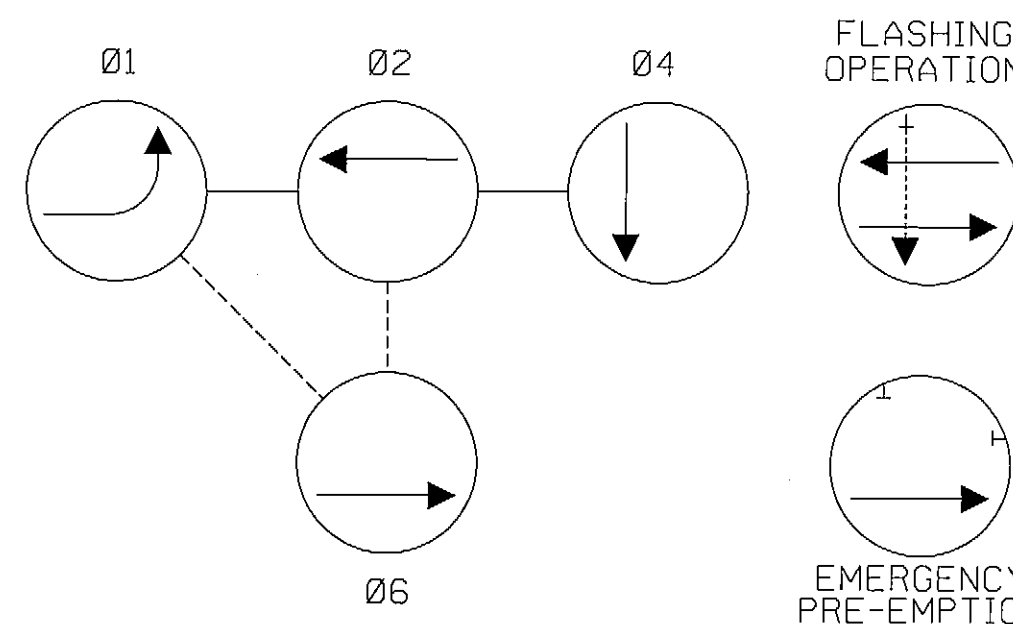
#### EXISTING SIGNS TO BE RELOCATED (SHOWN IN FINAL LOCATION)



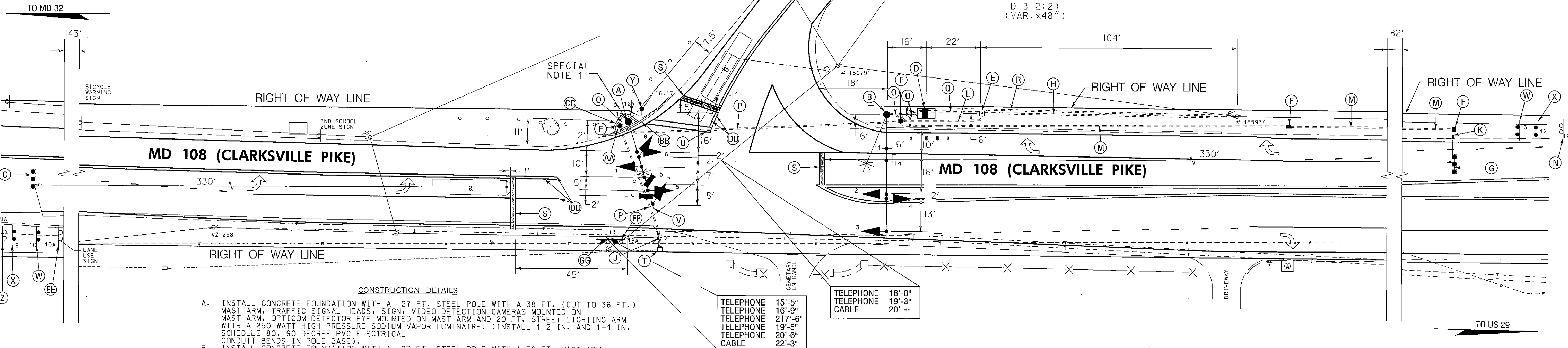
#### EXISTING SIGNS TO BE REMOVED



#### NEMA PHASING



NOTES:  
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.  
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.  
NORMAL OPERATION: TRAFFIC SIGNAL SHALL OPERATE IN FULL COLOR  
MODE FROM 5:00 AM TO 11:00 PM. ALL OTHER TIMES IT SHALL OPERATE  
IN FLASHING MODE.



- CONSTRUCTION DETAILS
- INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 38 FT. (CUT TO 36 FT.) MAST ARM, TRAFFIC SIGNAL HEADS, SIGN, VIDEO DETECTION CAMERAS MOUNTED ON MAST ARM, OPTICOM DETECTOR EYE MOUNTED ON MAST ARM AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
  - INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH A 50 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, AND 20 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
  - INSTALL MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN. (TO BE PLACED IN THRU LANE ONLY).
  - INSTALL NEMA SIZE "S" BASE MOUNTED CABINET AND CONTROLLER WITH SIZE "S" FOUNDATION STANDARD NO. MD 816.07. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
  - INSTALL EMBEDDED METERED SERVICE PEDESTAL WITH 2-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC CONDUIT BENDS IN PEDESTAL BASE.
  - INSTALL HANDHOLE, PROBE SET WITH 500 FT. LEAD-IN. (TO BE PLACED IN THRU LANE ONLY).
  - INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY BGE.
  - INSTALL 1 IN. GALVANIZED ELECTRICAL CONDUIT. (FOR DETECTOR WIRE SLEEVE)
  - INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT. (FOR DETECTOR WIRE SLEEVE)
  - INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
  - INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
  - REMOVE EXISTING D3-2(2) SIGN AND SUPPORTS.
  - INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
  - INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
  - INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE.
  - INSTALL 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT - TRENCHED FOR PROPOSED UNDERGROUND TELEPHONE SERVICE. CAP AND MARK CONDUIT 2 FT. ABOVE GRADE AT UTILITY POLE FOR USE BY OTHERS.
  - INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
  - USE EXISTING HANDHOLE.
  - REMOVE EXISTING PAVEMENT MARKING - STOPLINE.
  - CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
  - INSTALL D3-2(1) SIGN (VAR. X 30 IN.) ON TWO 4 IN. X 6 IN. TREATED WOOD POSTS APPROXIMATELY 600 FT. IN ADVANCE OF THE INTERSECTION ON EASTBOUND AND WESTBOUND MD 108. (L1=15 FT., L2=15 FT.)
  - INSTALL W3-3 "SIGNAL AHEAD" SIGN (48 IN. X 48 IN.) WITH "NEW" PANEL AND FLAGS ON TWO 4 IN. X 6 IN. TREATED WOOD POSTS APPROXIMATELY 750 FT. IN ADVANCE OF THE INTERSECTION ON EASTBOUND AND WESTBOUND MD 108. (L1=21 FT., L2=21 FT.) SIGNS TO BE REMOVED BY DISTRICT 7 FORCES 90 DAYS AFTER TRAFFIC SIGNAL GOES OPERATIONAL.
  - REMOVE EXISTING R1-1 SIGN AND SUPPORT. RELOCATE EXISTING STREET BLADE SIGNS ON ONE 4 IN. X 6 IN. TREATED WOOD SUPPORT. (L1=12 FT.) SHOWN IN FINAL LOCATION.
  - REMOVE EXISTING W2-2, D3-2(2), AND W13-1 SIGNS AND SUPPORTS.
  - INSTALL 5 IN. CONCRETE SIDEWALK FOR SIGNAL POLE BUILDOUT. SEE TSP-2 FOR DETAILS. (NOTE: CONTRACTOR SHALL SLOPE CONCRETE TOWARDS ROADWAY TO PROMOTE PROPER DRAINAGE.)
  - INSTALL COMBINATION CONCRETE CURB AND GUTTER (STANDARD NO. MD 620.02 TYPE "A").
  - INSTALL TYPE "A" BACK CURB TO PROVIDE SOIL EROSION STABILITY. INSTALLATION OF BACK CURB SHALL NOT IMPACT MAST ARM POLE ACCESS HOLE.
  - REMOVE EXISTING PAVEMENT MARKINGS BEYOND PROPOSED STOPLINE.
  - REMOVE EXISTING LANE USE CONTROL SIGN AND SUPPORTS.
  - REMOVE EXISTING M1-5(3) SIGN AND SUPPORTS.
  - INSTALL W1-7 ON TWO 4 IN. X 6 IN. TREATED WOOD SUPPORTS. (L1=14 FT., L2=14 FT.)

TELEPHONE	15'-5"
TELEPHONE	16'-9"
TELEPHONE	21'-6"
TELEPHONE	19'-5"
TELEPHONE	20'-6"
CABLE	22'-3"

#### GENERAL NOTES

- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
- VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.

TOD NO: XX650-13M  
SHA NO: HO221A57/B57  
MD 108 @ Sheppard Lane

#### SPECIAL NOTE:

CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.

**WR&A**  
WHITMAN, REQUARDT  
& ASSOCIATES, LLP  
801 South Caroline Street, Baltimore, Maryland 21231

#### GEOMETRIC LEGEND

== == == EXISTING  
== == == PROPOSED

#### UTILITY LEGEND

SD	SD	STORM DRAIN
G	G	GAS MAIN
W	W	WATER MAIN
S	S	SEWER MAIN
E	E	ELECTRIC CABLES
A	A	AERIAL CABLES
T	T	TELEPHONE CABLES
F	F	FIBER-OPTIC

APPROVALS	REVISIONS
TEAM LEADER 1/25/12	
ASST. DIV. CHIEF 1/27/12	
DIVISION CHIEF 1/30/12	
OFFICE DIRECTOR	

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 108 (CLARKSVILLE PIKE) AT SHEPPARD LANE  
CLARKSVILLE, MARYLAND

#### SIGNALIZATION PLAN SHEET

SCALE: 1" = 20'	ADVERTISED DATE: JANUARY 6, 2012	CONTRACT NO.: XX6505185
DESIGNED BY: B. DONOWAY	COUNTY: HOWARD	
DRAWN BY: B. DONOWAY	LOGMILE: 13010804.49	
CHECKED BY: N. LEARY	TMS NO.: L099	
F.A.P. NO.: SEE TITLE SHEET	TOD NO.:	
TS NO. 4826	DRAWING TSP-1	OF 2
	SHEET NO. 1	OF ###

PLOTTED: January 24, 2012  
FILE: N:\1669-199\CADD\PSG-F001\_0099.dgn